

0211[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0211; Directorate Identifier 2012-NM-230-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, -400F, and 747SR series airplanes. This proposed AD was prompted by reports of cracking at the aft upper corner of the main entry door (MED) 5 cutout. This proposed AD would require inspecting for the presence of repairs and measuring the edge margin at certain fastener locations around the upper aft corner of the door cutout, inspecting for any cracking of the fuselage skin assembly and bear strap in the aft upper corner area of the door cutout, and repairing or modifying the fuselage skin assembly and bear strap if necessary. We are proposing this AD to detect and correct cracking of the skin and bear straps at the aft upper corner of the MED 5 cutout, which could result in in-flight depressurization.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, Transport Airplane Directorate; 1601 Lind Avenue SW, Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6432; fax: (425) 917-6590; email: bill.ashforth@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2013-0211; Directorate Identifier 2012-NM-230-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received a report of a 3.65-inch-long crack that was found at the aft upper corner of the right MED 5 cutout on an airplane with 11,047 total flight cycles. The skin (including the bonded doubler and tripler) and bear strap were found to be cracked. This crack extended up to the door edge frame. That report also stated that cracks that did not extend up to the door edge frame were found on more than 30 airplanes. Those affected airplanes had flown between 10,042 and 31,140 total flight cycles. This condition, if not detected and corrected, could result in in-flight depressurization.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012. For information on the procedures and compliance times, see this service information at http://www.regulations.gov by searching for Docket No. FAA-2013-0211.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and the Service Information."

The phrase "related investigative actions" might be used in this proposed AD. "Related investigative actions" are follow-on actions that: (1) are related to the primary actions, and (2) are actions that further investigate the nature of any condition found. Related investigative actions in an AD could include, for example, inspections.

In addition, the phrase "corrective actions" might be used in this proposed AD. "Corrective actions" are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

Differences Between the Proposed AD and the Service Information

Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, specifies to contact the manufacturer for disposition of certain repair conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Table 3 in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, specifies post-modification inspections at the aft corner of the MED 5 cutouts, which may be used in support of compliance with section

121.1109(c)(2) or 129.109(b)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 129.109(b)(2)). However, this NPRM does not propose to require those post-modification inspections. This difference has been coordinated with Boeing.

Costs of Compliance

We estimate that this proposed AD affects 246 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect for repair and measure edge margin	1 work-hour X \$85 per hour = \$85 per door (up to 2 doors per airplane)	None	Up to \$170	Up to \$41,820

We estimate the following costs to do any necessary repetitive inspections, repairs or modifications that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these inspections, repairs or modification:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repetitive inspection of un-repaired area	6 work-hours X \$85 per hour = \$510 per door, per inspection cycle	None	\$510 per door, per inspection cycle
Repair or modification	10 work-hours X \$85 per hour = \$850 per door	Between \$7,654 and \$17,426 per door	Between \$8,504 and \$18,276 per door

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2013-0211; Directorate Identifier 2012-NM-230-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, -400F, and 747SR series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of cracking at the aft upper corner of the main entry door (MED) 5 cutout. We are issuing this AD to detect and correct cracking of the skin and bear straps at the aft upper corner of the MED 5 cutout, which could result in inflight depressurization.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections and Measurement

Except as specified in paragraph (h)(1) of this AD, at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012; Do a detailed inspection for the presence of repairs at the aft upper corner of the MED 5 cutout, and measure the edge margin at certain fastener locations around the corner of the door cutout, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012.

- (1) If a repair is found: Before further flight, inspect or change the repair, using a method approved in accordance with the procedures specified in paragraph (j) of this AD.
- (2) If no repair is found, except as specified in paragraph (h)(1) of this AD, at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, do detailed and high frequency eddy current (HFEC) inspections for any cracking of the fuselage skin assembly and bear strap in the aft upper corner area of the door cutout, as applicable, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, except as required by paragraph (h)(2) of this AD. Do all applicable corrective actions before further flight. Options provided in Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, for accomplishing the corrective action are acceptable for the corresponding requirements of

this paragraph, provided that the inspections and preventative modification are done at the applicable times in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012.

(h) Exceptions to the Service Information

- (1) Where Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, specifies compliance times "after the original issue date of this service bulletin," this AD requires compliance within the specified compliance times "after the effective date of this AD."
- (2) Where Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, specifies to contact Boeing for appropriate action: Before further flight, do the action using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Post-Repair/Post-Modification Inspections

The post-repair or post-modification inspections specified in Table 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, are not required by this AD.

Note 1 to paragraph (i) of this AD: The post-repair or post-modification inspection specified in Table 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, may be used in support of compliance with section 121.1109(c)(2) or 129.109(b)(2) of the Federal Aviation Regulations (14 CFR 121.1109(c)(2) or 14 CFR 129.109(b)(2)). The corresponding actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2839, dated November 6, 2012, are not required by this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14

- CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(k) Related Information

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6432; fax: (425) 917-6590; email: bill.ashforth@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate; 1601 Lind Avenue SW, Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. Issued in Renton, Washington, on March 20, 2013.

Jeffrey E. Duven, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

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